

Acquisition Reform Success Story

Program Director: Col James Armor
Designated Acquisition Cmdr: Lt Gen Roger DeKok
Prime Contractor:
 Antenna Electronics: Cossor Electronics Limited
 Contractor PM: Mr. Steele
Subcontractor:
 Antenna: Raytheon/E-Systems

NAVSTAR Global Positioning System (GPS) Antenna System (GAS-1)

Program Description

GPS Antenna System-1 (GAS-1) provides airborne platforms with enhanced anti-jam capabilities, allowing access to the GPS signal in a multi-threat electromagnetic environment.

How Acquisition Streamlining Made a Difference

The GPS Antenna System-1 acquisition aggressively combined modified NDI and Best Value acquisition approaches into a single innovative performance-based acquisition strategy, and created a carefully crafted Request for Proposal that will be a model for future GPS User Equipment acquisitions. The Joint Program Office (JPO) started under the extremely tough constraints of a Congressionally-mandated integration schedule, no development funds, deficient prior specifications, unknown performance of current anti-jam avionics, and backward compatibility integration constraints. The JPO personnel squarely tackled each of these issues, educating themselves and everyone around them and introduced SMC to a genuine Best Value approach. GAS-1 slashes Mil-Specs and CDRLs required on the previous contract by 88% and 74%, respectively. The JPO rigorously distilled essential performance requirements, as exemplified by the Satellite Coverage Improvement Factor which focuses on impact to the user (navigation solution in battlefield conditions) versus achieving an abstract technical goal. Through constant communication with both the customer community and the supplier/contractor community (exemplified by GAS-1 implementing a cutting edge electronic acquisition bulletin board), we ensured the needs of both were carefully considered in formulating and executing our acquisition plan. This resulted in selecting Cossor Electronics Limited's NDI proposal as the Best Value approach to obtain the necessary anti-jam enhancements to improve GPS war fighting effectiveness.

| Areas of Merit | Current System | GAS-1 |
|--------------------|-----------------------------------|---|
| | AE-1/AE-1A & CRPA-2 | AE & CRPA |
| Required Mil-Specs | 33 | 4 (88% reduction) |
| Required CDRLs | 85 | 22 (74% reduction) |
| Threat | Single Jammer, Static Environment | Multiple Jammers, Dynamic Environ (600+% more effective) |
| Warranty | 18 mo/5 yr | 10 yr, 5-day turn around time |
| Average Cost | \$30k | \$20k (33% reduction) |

Continuing and expanding on a policy pioneered with the JPO's CSEL and Block IIF source selections, debriefing of the non-selected offerors emphasized openness, depth, and detail. Each non-selected offeror received the same briefing, using the same briefing charts, as presented to the Source Selection Authority (SSA). Cossor Electronics Limited's (the winning contractor) information, including cost data, was also displayed during each briefing, with their concurrence. The debriefings ensured each offeror had a solid understanding of how its proposal was rated, and why the government selected Cossor. A complete win-win situation, the offerors were left with valuable lessons learned to apply to the next solicitation and the government was able to make a truly best value selection, based on our acquisition strategy of being willing to pay a higher price for significant performance increase.

Bottom Line: The GAS-1 program applied acquisition streamlining to itself to exceed customer performance requirements (doing it **Better**), used a modified NDI approach, shaving years off a full R&D acquisition (doing it **Faster**), and procured a superior anti-jam antenna system at only 67% of the cost of the current system (doing it **Cheaper**).